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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,701	09/15/2005	Einar Paul Edvardsen	3900.1000-000	6874

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EXAMINER	
LEE, ANDREW CHUNG CHEUNG	
ART UNIT	PAPER NUMBER
2419	

MAIL DATE	DELIVERY MODE
06/02/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/530,701	EDVARDSEN ET AL.	
	Examiner	Art Unit	
	Andrew C. Lee	2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 February 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18-43* is/are pending in the application.

4a) Of the above claim(s) *1-17* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Claims 1 – 17 have been canceled.

2. Claims 18 – 43 have been newly added and are pending.

Claim Objections

3. Claims 23, 31, 37, 19, 30, 36 are objected to because of the following informalities:

Regarding claims 23, 31, 37, the claimed subject matter "said roaming network terminals" should be corrected as "said roaming mobile terminals" so as in consistency with previous claimed. Appropriate correction is required.

Regarding claims 19, 30, 36, the claimed subject matter "said first and second capacities are bandwidth" should be corrected as "said first capacity and said second capacity are bandwidth. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 25 recites the limitation "terminals of said fixed subscriber" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 26 recites the limitation "said terminals of said fixed subscriber" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 39 recites the limitation "terminals of said fixed subscriber" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 40 recites the limitation "said terminals of said fixed subscriber" in lines 1- 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 43 recites the limitation "**the** fixed broadband network's management and charging requirements" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 18 – 28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. .

Regarding claim 18, claim(s) 18 is/are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to particular machine, or (2) transform underlying subject matter (such as an article or material) to a different state or thing. See page 10 of In Re Bilski 88 USPQ2d 1385. The instant claims are neither positively tied to a particular machine that accomplishes the claimed method steps nor transform underlying subject matter, and therefore do not qualify as a statutory process.

Additionally, claims 19 – 28 are also rejected under 35 U.S.C. 101, since the claims are dependent upon independent claim 18.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 18, 19, 30, 36, 20, 21, 22, 27, 28, 29, 35, 41, 42, 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chow et al. (US 7010002 B2) in view of Peleg et al. (US 20040042398 A1).

Regarding claim 18, Chow et al. disclose a method of using a wireless Local Area Network (LAN) for providing access to a fixed broadband network to roaming mobile terminals via the wireless LAN, said wireless LAN being connected to a broadband access line of the fixed broadband network, the broadband access line having a first capacity subscribed for by a fixed subscriber *("Home 'Enterprise Wireless Communication Platform' EWCSP" as wireless local area network, "broadband transport network" as a fixed broadband network, and elements TIA/EIA-136 IEEE 802.11 EDGE/GPRS as roaming mobile terminals, and broadband transport link as a first capacity subscribed for by a fixed subscriber; Fig. 1, col. 2, lines 29 – 62*), except access line further having a second capacity not subscribed for, the method comprising allocating at least a portion of the second capacity to the roaming mobile terminals.

Peleg et al. in the same field of endeavor teach access line further having a second capacity not subscribed for, the method comprising allocating at least a

portion of the second capacity to the roaming mobile terminals (a complementary unoccupied portion of the link capacity" is interpreted as having a second capacity not subscribed and at least a portion of the second capacity to the roaming mobile terminals *(Abstract, para. [0051], [0066]).*

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Chow et al. to include the features of having a second capacity not subscribed for, the method comprising allocating at least a portion of the second capacity to the roaming mobile terminals as taught by Peleg et al. One of ordinary skill in the art would be motivated to do so for providing improved apparatus and methods for reducing traffic congestion *(as suggested by Peleg et al., see para. [0050]).*

Regarding claims 19, 30, 36, Chow et al. disclose wherein said first capacity is bandwidth *(at least on 6MHz downstream, col. 8, lines 37 - 49),* Chow et al. do not disclose explicitly wherein said first and second capacities are bandwidth.

Peleg et al. in the same field of endeavor teach wherein said first and second capacities are bandwidth ("occupied portion and a complementary unoccupied portion of the link capacity" is interpreted as first and second capacities are bandwidth *(Abstract, para. [0051], [0066]).*

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Chow et al. to include the features of wherein said first and second capacities are bandwidth as taught by

Peleg et al. One of ordinary skill in the art would be motivated to do so for providing improved apparatus and methods for reducing traffic congestion *(as suggested by Peleg et al., see para. [0050]*

Regarding claim 20, Chow et al. disclose wherein said wireless LAN has a coverage zone at subscriber premises of said fixed broadband *network ("Home 'Enterprise Wireless Communication Platform' EWCSP" and target boundaries as wireless LAN has a coverage zone at subscriber premises; Fig. 1, col. 2, lines 29 – 62, col. 10, lines 23 – 33).*

Regarding claim 21, Chow et al. disclose wherein said wireless LAN is installed at said subscriber premises (*Fig. 1, col. 2, lines 29 – 62, col. 10, lines 23 – 55).*

Regarding claim 22, Chow et al. discloses 22. (New) The method according to claim 20, wherein said roaming mobile terminals are casually passing through said coverage zone *("the subscriber may use the same wireless phone at home, on the road, and in the office" interpreted as said roaming mobile terminals are casually passing through said coverage zone; Fig. 1, col. 2, lines 29 – 62, col. 10, lines 23 – 55).*

Regarding claim 27, Chow et al. disclose the method claimed further comprising performing security and authentication functions securing terminals of

said fixed subscriber and said roaming mobile terminals against tapping and illegal use of said fixed broadband network *("security measure ….invoke an authentication procedure" interpreted as performing security and authentication functions securing terminals; Fig. 6, col. 16, lines 8 – 22).*

Regarding claim 28, Chow et al. disclose the method calimed further comprising providing protocols in said fixed broadband network for performing mobility, handover and roaming procedures *("TIA/EIA-136, EDGE/GPRS, IEEE 802.11b" interpreted as providing protocols in said fixed broadband network for performing mobility, handover and roaming procedures; Fig. 1, col. 10, lines 23 – 47, col. 12, lines 18 – 54).*

Regarding claim 29, Chow et al. disclose a digital, mobile broadband network providing mobile or nomadic broadband services *(Fig. 1, Fig. 7, Fig. 9, col. 21, lines 13 – 46)*, the digital mobile broadband network comprising: a fixed broadband network *(broadband transport network; col. 2, lines 42 – 55)*; at least one wireless local area network (LAN) connected via a broadband access line to the fixed broadband network, the broadband access line having a first capacity subscribed for by fixed subscribers *("Home 'Enterprise Wireless Communication Platform' EWCSP" as wireless local area network, "broadband transport network" as a fixed broadband network, and elements TIA/EIA-136 IEEE 802.11 EDGE/GPRS as roaming mobile terminals, and broadband transport link as a first capacity subscribed for by a fixed subscriber; Fig. 1, col. 2, lines 29 – 62)*,

except the broadband access line further having a second capacity not subscribed for, wherein at least a portion of the unsubscribed capacity is allocated to roaming mobile terminals.

Peleg et al. in the same field of endeavor teach access line further having a second capacity not subscribed for, wherein at least a portion of the unsubscribed capacity is allocated to roaming mobile terminals ("a complementary unoccupied portion of the link capacity" is interpreted as having a second capacity not subscribed and wherein at least a portion of the unsubscribed capacity is allocated to roaming mobile terminals *(Abstract, para. [0051], [0066])*.

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Chow et al. to include the features of the broadband access line further having a second capacity not subscribed for, wherein at least a portion of the unsubscribed capacity is allocated to roaming mobile terminals as taught by Peleg et al. One of ordinary skill in the art would be motivated to do so for providing improved apparatus and methods for reducing traffic congestion *(as suggested by Peleg et al., see para. [0050])*.

Regarding claim 35, Chow et al. disclose a home network device providing mobile or nomadic broadband services in an existing fixed, broadband network comprising a number of subscribers *(element 104 MTA interpreted as home network device; Fig. 1, col. 2, lines 43 – 66, col. 6, lines 33 – 57)*, said

home network device comprising: a wireless Local Area Network (LAN) providing local, wireless broadband communication for terminals of a subscriber of the fixed, broadband network and wireless broadband communication for roaming mobile terminals *("Home 'Enterprise Wireless Communication Platform' EWCSP" as wireless local area network, "broadband transport network" as a fixed broadband network, and elements TIA/EIA-136 IEEE 802.11 EDGE/GPRS as roaming mobile terminals; Fig. 1, col. 2, lines 29* – 62, col. 6, lines 33 – 57); a broadband access line connected to the fixed broadband network *("broadband transport link" interpreted as broadband access line, and "broadband transport network" interpreted as fixed broadband network, Fig. 1, col. 6, lines 14 – 57)*, the broadband access line having a first capacity subscribed for by the subscriber *(6 MHz downstream, col. 8, lines 37 – 49)* and except a second capacity not subscribed for; Chow et al. also disclose a resource management system ("system controller, the network server Platform (NSP)" interpreted as a resource management system) except for allocating at least a portion of the second capacity to the roaming mobile terminals.

Peleg et al. in the same field of endeavor teach a second capacity not subscribed for; allocating at least a portion of the second capacity to the roaming mobile terminals *(Abstract, para. [0051], [0066])*.

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Chow et al. to include the features of a second capacity not subscribed for; allocating at least a portion of the second capacity to the roaming mobile terminals as taught by Peleg et al.

One of ordinary skill in the art would be motivated to do so for providing improved apparatus and methods for reducing traffic congestion *(as suggested by Peleg et al., see para. [0050])*.

Regarding claim 41, Chow et al. disclose protocol means providing seamless mobility and handover procedures for maintaining a connection to said fixed broadband network for a mobile terminal passing through said wireless LAN *("TIA/EIA-136, EDGE/GPRS, IEEE 802.11b" interpreted as providing protocols in said fixed broadband network for performing mobility, handover and roaming procedures; Fig. 1, col. 10, lines 23 – 47, col. 12, lines 18 – 54)*.

Regarding claim 42, Chow et al. discloses 42. (New) The home network device according to claim 35, comprising protocol means providing roaming between different fixed network operators, peer-to-peer/Ad Hoc operators and said wireless LAN *("TIA/EIA-136, EDGE/GPRS, IEEE 802.11b" interpreted as protocol means providing roaming between different fixed network operators, peer-to-peer/Ad Hoc operators and said wireless LAN; Fig. 1, col. 5, lines 13 - 33, col. 10, lines 23 – 47, col. 12, lines 18 – 54)*.

Regarding claim 43, Chow et al. disclose function means supporting the fixed broadband network's management and charging requirements *(col. 8, lines 57 – 67, col. 10, lines 36 – 42)*.

8. Claims 23, 31, 37, 24, 32, 38, 25, 33, 39, 26, 34, 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chow et al. (US 7010002 B2) and Peleg et al. (US 20040042398 A1) as applied to claim 18 above, and further in view of Hagen (US 20020075844 A1).

Regarding claims 23, 31, 37, Chow et al. and Peleg et al. do not disclose explicitly further comprising allocating a portion of said first capacity to said roaming network terminals.

Hagen in the same field of endeavor teaches allocating a portion of said first capacity to said roaming network terminals *("allocates a portion of the NAS's available uplink bandwidth"; Fig. 17, Fig. 19, para. [0104]).*

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Chow et al. and Peleg et al. to include the features of allocating a portion of said first capacity to said roaming network terminals as taught by Hagen. One of ordinary skill in the art would be motivated to do so for effectively integrating diverse private and public networks to provide ubiquitous, network access at broadband data rates using existing infrastructure *(as suggested by Hagen, see paragraph [0010]).*

Regarding claims 24, 32, 38, Chow et al. and Peleg et al. do not disclose explicitly wherein said portion of said first capacity is an unused portion of said first capacity *(" available uplink bandwidth" interpreted as an unused portion of said first capacity; Fig. 17, Fig. 19, para. [0104]).*

Hagen in the same field of endeavor teaches wherein said portion of said first capacity is an unused portion of said first capacity *("allocates a portion of the NAS's available uplink bandwidth"; Fig. 17, Fig. 19, para. [0104])*.

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Chow et al. and Peleg et al. to include the features of wherein said portion of said first capacity is an unused portion of said first capacity as taught by Hagen. One of ordinary skill in the art would be motivated to do so for effectively integrating diverse private and public networks to provide ubiquitous, network access at broadband data rates using existing infrastructure *(as suggested by Hagen, see paragraph [0010])*.

Regarding claims 25, 33, 39, Chow et al. and Peleg et al. do not disclose explicitly wherein said portion of said first capacity is released to said roaming mobile terminals through priority mechanisms giving priority to roaming mobile terminals over terminals of said fixed subscriber.

Hagen in the same field of endeavor teaches wherein said portion of said first capacity is released to said roaming mobile terminals through priority mechanisms giving priority to roaming mobile terminals over terminals of said fixed subscriber *(paras. [0104], [0109], [0110])*.

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Chow et al. and Peleg et al. to include the features of wherein said portion of said first capacity is released to said roaming mobile terminals through priority mechanisms giving priority to

roaming mobile terminals over terminals of said fixed subscriber as taught by Hagen. One of ordinary skill in the art would be motivated to do so for effectively integrating diverse private and public networks to provide ubiquitous, network access at broadband data rates using existing infrastructure *(as suggested by Hagen, see paragraph [0010])*.

Regarding claims 26, 34, 40, Chow et al. disclose wherein said terminals of said fixed subscriber are wireless terminals *(Fig. 1, col. 2, lines 29 – 62)*.

Response to Arguments

9. Applicant's arguments with respect to claims 18 – 43 have been considered but are moot in view of the new ground(s) of rejection.

Regarding claim 18, applicant argues reference Chow et al. and Hagen apparently fails to disclose at least the following feature of the new claim 18 "the broadband access line further having a second capacity not subscribed for, the method comprising allocating at least a portion of the second capacity to the roaming mobile terminals". Examiner respectfully disagrees.

Examiner contends the combined system of reference Chow et al. and newly found reference Peleg et al. teaches the claimed subject matter of having a second capacity not subscribed for, the method comprising allocating at least a portion of the second capacity to the roaming mobile terminals. Reference Chow et al. teaches first capacity for roaming mobile terminal, see Chow Fig. 1, while newly found reference Peleg et al. remedies the deficiencies of chow et al. and

Hagen by disclosing the allocating at least a portion of the second capacity to the roaming mobile terminals. Examiner interpreted allocating at least a portion of the second capacity to the roaming mobile terminals as a complementary unoccupied portion of the link capacity, see Peleg et al., para. [0051], [0066].

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Siren (US 6763236 B2) discloses resource allocation and service providing over a wireless network.
b) Foore et al. (US 6542481 B2) disclose dynamic bandwidth allocation for multiple access communication using session queues.
c) Struhsaker (US 20080259826 A1) discloses system for coordination communication within and between cells in a wireless access system and method of operation.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571)272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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